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## ROUND ROBIN ARBITRATION SYSTEM

### ABSTRACT OF THE INVENTION

Round robin arbitration system includes a first round robin arbitration  
5 module and a second round robin arbitration module. The first round robin  
arbitration module has a first bit width. It is configured to partition a plurality  
of requests into a plurality of blocks of requests, to select a block having one  
or more active requests using round robin arbitration, and to generate a first  
index corresponding to the selected block. The second round robin  
10 arbitration module has a second bit width. It is configured to store each  
request of the selected block, to select each active request of the selected  
block using round robin arbitration, to generate a second index  
corresponding to the selected active request, and to generate a first signal  
for synchronizing operation of the first and second modules. The round  
15 robin arbitration system has a bit width that a product of the first and second  
bit widths.